DOCUMENT RESUME

ED 419 969 CE 076 672

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TITLE Lessons from Assisting College Students To Correct Faulty Career Attributions.
PUB DATE 1998-04-17
NOTE 24p.; Paper presented at the Annual Meeting of the American Educational Research Association (San Diego, CA, April 17, 1998).
PUB TYPE Reports - Research (143) -- Speeches/Meeting Papers (150)
EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS *Attribution Theory; *Career Choice; *Career Development; *College Students; Decision Making; Higher Education; Models; *Occupational Information

ABSTRACT

The recent application of Weiner's attribution theory to the career exploration and planning process has resulted in a series of investigations designed to assist college students to develop an optimistic attributional style for career decision making. This paper undertakes a comprehensive review of three attributional retraining investigations that have been conducted in the career development area. The studies provide initial evidence of the efficacy of attributional retraining in career counseling contexts. Suggestions for incorporating principles of attribution theory into the career counseling process are given. A brief introduction to an attributional model of career decision making is made. Ongoing development of the model is intended to provide career development researchers and practitioners with a useful framework for integrating causal attributions for career-related events into the career decision-making process. (Contains 38 references.) (KC)

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Running head: CORRECTING FAULTY CAREER ATTRIBUTIONS

Lessons From Assisting College Students to Correct Faulty Career Attributions

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CE 076 672

Abstract

The recent application of Weiner's (1986) attribution theory to the career exploration and planning process has resulted in a series of investigations designed to assist college students in developing an optimistic attributional style for career decision making. This presentation provides a comprehensive review of three attributional retraining investigations that have been conducted in the career development area and offers suggestions for incorporating principles of attribution theory into the career counseling process. The presentation concludes with a brief introduction to an attributional model of career decision making.

Lessons From Assisting College Students to Correct Faulty Career Attributions

Theoretical Basis for Attributional Retraining

Attributional retraining programs are derived from attributional conceptions of motivation, self-efficacy, and learned helplessness (Van Overwalle, Segebarth, & Goldchstein, 1989). Each of these theoretical perspectives assumes that negative events can result in either detrimental or adaptive consequences on a person's emotional well-being and achievement depending on the particular attributions used to explain the outcomes. By promoting adaptive causal ascriptions, attributional retraining attempts to alleviate negative psychological and behavioral consequences often associated with previous failure.

Although related to Bandura's (1977, 1982, 1997) self-efficacy theory and Seligman's theory of learned helplessness (Seligman, 1975; Abramson, Seligman, & Teasdale, 1978), attributional retraining strategies are primarily based on Weiner's (1986) attribution theory. According to Weiner, people seek to explain outcomes in their lives that are particularly novel, important, or negative. Such explanations, referred to as causal attributions, directly influence subsequent cognitions, emotions, and behaviors (Perry, Hechter, Menec, & Weinberg, 1993). Weiner's theory proposes a three-dimensional system for classifying attributions: locus of causality (internal vs. external), controllability (controllable vs. uncontrollable), and stability (stable vs. unstable). These dimensions combine to form a locus X controllability X stability matrix, with "the unique locus, stability, and controllability properties of an attribution [having] the capacity to substantially alter a person's motivation and behavior regarding future outcomes and events" (Perry et al., 1993, pp. 689-690).

The degree to which particular attributions are viewed as adaptive or maladaptive is primarily based on the type of outcome (success vs. failure) that is experienced and the causal ascriptions that follow. When an outcome is considered a failure, for example, a maladaptive attributional style would be one in which the outcome is attributed to stable and uncontrollable factors. Such attributions might lead individuals to believing that they possess little or no control over certain outcomes in their lives and their lack of control will persist over time. Consequently, such individuals may develop a sense of learned helplessness associated with a particular event or situation, leading to decreased effort, negative emotions, and a general pessimistic attributional style (Graham, 1991).

In attributional retraining, an attempt is made to replace maladaptive attributions with causal ascriptions that are temporary (i.e., unstable), controllable, and internal, resulting in the belief that previous failure and difficulty is due to insufficient effort rather than low ability or bad luck. Such attributions are hypothesized to increase expectations for future success and, therefore, to lead to increased persistence and performance in subsequent tasks and more positive emotional responses (Forsterling, 1985; Menec et al., 1994; Van Overwalle et al., 1989; Weiner, 1986).

Attributional retraining strategies have been successful in a variety of educational domains, with evidence to support the use of attributional retraining as a treatment for enhancing college students' academic achievement (Perry & Penner, 1990; Van Overwalle & De Metsenaere, 1990; Van Overwalle et al., 1989; Wilson & Linville, 1982, 1985), helping students cope with depression and alcoholism (Antaki & Brewin, 1982; Weiner & Litman-Adizes, 1980),

and assisting students in maintaining general emotional well-being (Green-Emrich & Altmaier, 1991). Based on consistent evidence supporting the efficacy of attributional retraining, it has been heralded as one of the most effective motivational techniques for improving attitude and performance in educational settings (Clifford, 1986; Perry et al., 1993).

Application of Attributional Retraining to Career Counseling

Two recently published articles (Luzzo, Funk, & Strang, 1996; Luzzo, James, & Luna, 1996) include detailed descriptions of three studies designed to evaluate the effectiveness of attributional retraining as a career intervention among college students. A review of each of these studies provides initial evidence of the efficacy of attributional retraining in career counseling contexts.

Study 1

Luzzo, Funk, and Strang (1996) reported the results of the initial published investigation evaluating the effectiveness of attributional retraining as a career counseling technique. In their study, 60 participants (41 women and 19 men) attending a medium sized regional university in the South were classified as having a relatively internal or external locus of control based on their scores on the Career Locus of Control Scale (Trice, Haire, & Elliott, 1989). Participants were then randomly assigned to either the treatment or the control group.

The intervention was an attributional retraining procedure designed to persuade students to attribute low levels of confidence in making career decisions and career-related failures to a lack of effort. Specifically, the attributional retraining treatment was an 8-min color videotape in which both a female and a male college graduate described their career development over the course of their late adolescent and early adult years. Specifically, each graduate recounted several incidents in which, in the face of repeated career-related failures and concerns (e.g., career

indecision, unsuccessful job searches, difficulty in selecting a college major), they persisted and went on to achieve substantial success in their eventual career choice. Both graduates made several statements implying that career decisions are internally-caused and controllable and encouraged viewers to attribute effective career decision-making to effort. They also persuaded students to believe that successful effort in the career development domain was dependent upon persistence. The types of statements made by the graduates in the attributional retraining video included the following:

"I realized as I was growing up that anything worthwhile in terms of my career was going to take effort and hard work."

"I pretty much took control over my career decisions."

"I've worked hard...and it has helped me. I know that in the future it'll pay off. And its something I'm in control of. I'm in charge of what I'm doing."

"If I hadn't taken the time and put forth the effort that I did, I wouldn't be doing as well as I am now."

One-half of the participants in each career locus of control group were randomly assigned to the no-training (control) condition. Students in this no-training condition watched an 8-min videotape of the same two college graduates shown in the attributional retraining video. However, in the no-training video, the graduates discussed their career development without referring in any way to persistence and effort (i.e., without any reference to career locus of control) and without verbally persuading students in any way. The types of statements made in the control video included the following:

"In high school I took a lot of basic, general education classes, and then I went to a

community college, but I really didn't have a focus."

"Then I started teaching in the language lab on campus."

"I worked at a car lot for a few years, washing cars and cleaning up the lot."

"Now I'm working on campus with incoming freshmen to help them get adjusted to college life."

Prior to watching one of the two videotapes, all participants completed the Career Decision-Making Self-Efficacy Scale (CDMSES; Taylor & Betz, 1983). Two weeks following the videotape viewing, all participants again completed the CDMSES. The two-week interval between intervention and post-testing was designed to decrease the possibility of demand characteristics and to provide an examination of the effects of the attributional retraining treatment over a relatively brief period of time.

An Attributional Retraining (treatment vs. control) X Career Locus of Control (internal vs. external) ANCOVA for CDMSE yielded a statistically significant interaction, $F(2,54) = 4.615$, $p < .05$, and significant main effects for both career locus of control, $F(2,54) = 3.647$, $p < .05$, and attributional retraining, $F(2,54) = 3.310$, $p<.05$. The main effect for career locus of control indicated that changes in CDMSE were significantly greater for participants with an external career locus of control (an increase from a mean of 323.00 to 339.93) than for participants with an internal career locus of control (an increase from a mean of 370.87 to 375.23). The main effect for attributional retraining indicated that changes in CDMSE were significantly greater for students in the treatment condition (from a mean of 343.60 to 362.17) than for students in the control group (from a mean of 350.27 to 353.00).

Planned comparisons revealed the absence of any significant changes in CDMSE for

participants in the control conditions [internal $t(14) = 1.43$, $p > .05$; external $t(14) = .02$, $p > .05$]. Participants in the attributional retraining condition who originally exhibited an internal locus of control also showed no changes in CDMSE following the treatment, $t(14) = .55$, $p > .05$. As predicted, however, a significant change in CDMSE was revealed for participants who originally exhibited an external career locus of control and received the attributional retraining treatment, $t(14) = 3.37$, $p < .05$. An examination of the post-treatment CDMSE scores between the treatment and control groups (for those participants who initially possessed an external career locus of control) revealed an effect size (ES) of 1.07.

Study 2

Luzzo, James, and Luna (1996) conducted two additional studies to further evaluate the efficacy of attributional retraining as a career counseling technique for college students. In particular, Luzzo, James and Luna designed their investigations to determine whether adaptive changes in college students' career beliefs and increased career exploration behavior would result from exposure to attributional retraining.

Thirty-six participants (22 women and 14 men) attending a medium sized, public university in the Southwest participated in the study that evaluated the effects of attributional retraining on career beliefs. Because the results of Luzzo, Funk, and Strang's (1996) investigation revealed that attributional retraining was particularly effective for students who initially possessed an external career locus of control, all potential participants were administered the Career Locus of Control Scale (CLCS; Trice et al., 1989). Based on previous uses of the CLCS with college students (Luzzo, 1995; Luzzo & Ward, 1995) and normative data supplied by Trice et al. (1989), CLCS scores greater than 5 were selected as representing a general belief

relative to other college students that career decisions are externally-caused and uncontrollable. Only the students whose scores on the CLCS were above 5 (36 students out of an original pool of 78) participated in the study.

After completing three scales included in the Career Beliefs Inventory (CBI; Krumboltz, 1991), namely the control, responsibility, and working hard scales, participants were randomly assigned to either the attributional retraining treatment group or the control group. Similar to the procedure used in Luzzo, Funk, and Strang's (1996) initial investigation, students in the treatment group then went to a classroom where they watched an 8-min videotape in which both a male and a female graduate from the university discussed their career development during their adolescent and early adult years. Both graduates recounted numerous incidents in which, despite career-related failures and difficulties (e.g., unsuccessful job searches, difficulty selecting a major, career indecision), they persisted and went on to achieve success and satisfaction in their career choice. Students randomly assigned to the control group also went to a classroom where they watched an 8-min videotape of the same two college graduates shown in the attributional retraining video. In the control group, however, the graduates discussed their career development without any reference to personal effort or perceived control. Instead, references were made to different jobs that were held by the graduates as they presented a type of video resume. In this study, post-treatment data (i.e., scores on the control, responsibility, and working hard scales of the CBI) were collected one month following the treatment phase.

Univariate ANCOVAs were calculated with treatment/control group as the independent variable, post-treatment CBI scores as the dependent variables, and pre-treatment CBI scores as covariates. (A Bonferonni adjusted alpha of .05/3 = .017 was used to determine the statistical

significance of the ANCOVAs.) Results indicated a significant difference ($p < .017$) in post-treatment CBI scale scores between the attributional retraining group and the control group for each of the career beliefs assessed in the study: control $F(1, 34) = 11.10$; responsibility $F(1, 34) = 6.48$; working hard $F(1, 34) = 9.35$.

Findings revealed that participants who received attributional retraining exhibited significant increases in their beliefs that they have control over and responsibility for career decision making and that hard work brings success. The career beliefs of participants who did not receive attributional retraining, however, remain unchanged relative to the career beliefs of participants in the treatment group. An analysis of post-treatment CBI scores between participants in the treatment and control conditions revealed effect sizes of .72, 1.27, and .64 for the control, responsibility, and working hard scales, respectively.

Study 3

The purpose of the third attributional retraining study reported in the literature (Luzzo, James, & Luna, 1996) was to determine the extent to which attributional retraining alters students' actual attributions for career decision making and to evaluate the degree to which attributional retraining influences career decision-making behavior. The 38 participants (25 women and 13 men) were attending a medium-sized public university in the Southwest.

Attributions for career decision making were measured by the recently developed Assessment of Attributions for Career Decision Making (AACDM) (Luzzo & Jenkins-Smith, 1998). Each of the three attributional domains included in Weiner's (1996) attribution theory (controllability, causality, and stability) are assessed in the AACDM by three statements, two of which are positively worded and one which is negatively worded and reverse scored. Statements

tapping the controllability domain include items that focus on an individual's sense of control over the career decision-making process (e.g., "The career decisions that I make are under my control."). Statements tapping the causality domain include items that focus on an individual's belief that forces within her or him are responsible for career decision making (e.g., "If my career decisions lead to success, it will be because of my skills and abilities"). Statements within the stability domain evaluate an individual's belief in the degree to which career decisions remain stable over time (e.g., "The recent career decisions I have been making are the same kinds of career decisions I have made in the past."). Adequate psychometric support for the use of the AACDM is provided in the AACDM Manual (Luzzo, 1997).

The six item Environmental Exploration-Revised (EE-R) scale and the nine item Self-Exploration-Revised (SE-R) scale from the Career Exploration Survey (CES; Stumpf, Colarelli, & Hartman, 1983) were used to assess participants' career exploration behavior. The EE-R and SE-R scales of the CES were developed by Blustein (1988) to capture the array of exploratory activities that characterize the career decision-making behavior of college students. When completing the EE-R and SE-R scales during post-treatment data collection, participants were asked to indicate, on a five-point Likert scale, the extent to which they have engaged in various environmental and self-exploratory activities within the last six weeks. Higher scores reflect greater activity in career exploration activities.

The experimental procedure used in this investigation was nearly identical to the procedure utilized in the first two attributional retraining studies. This time, however, pre-treatment data collection included the AACDM, and follow-up data collection, which included completion of the AACDM and the EE-R and SE-R scales of the CES, occurred six weeks

following the treatment.

A multivariate analysis of covariance (MANCOVA) was performed with treatment/control group as the independent variable, the three AACDM scales and the two CES scales at posttest as the dependent variables, and pretest AACDM scores as covariates. Results indicated significant effects of the attributional retraining on career decision-making attributions and engagement in career exploration activities, $F(5, 32) = 6.31$, $p < .001$. Students who received attributional retraining exhibited a stronger sense of control over career decisions (ES = 1.25) and a stronger belief that career decisions are internally-caused (ES = 1.47) than students in the control group. Findings also revealed that students who received attributional retraining engaged in significantly greater environmental (ES = 1.32) and self-exploration activities (ES = 1.24) than students in the control group. Differences were not revealed between the treatment and control groups on the stability dimension of the AACDM.

Summary of Previously Published Effectiveness Studies

The purpose of attributional retraining procedures is to replace maladaptive attributions with attributions that increase the likelihood of obtaining desired goals (Perry et al., 1993; Weiner, 1986). The college students who participated in the three attributional retraining studies reviewed in this presentation exhibited significant increases in their beliefs associated with control over and responsibility for making career decisions. This was especially true for those students who initially possessed an external career locus of control.

Generally speaking, empirical research conducted over the past couple of years supports the claim that attributional retraining can alter students' attributions for events associated with the

career decision-making process. Instead of attributing career decision making to externally-caused, uncontrollable factors, students who received the attributional retraining treatment in these studies began to develop an attributional style that stresses personal control over and responsibility for the career decision-making process. Although additional research must be conducted before realizing the full potential of attributional retraining as a career intervention, results of initial research suggest that attributional retraining can have a positive influence on the career development of college students. The noteworthy strengths of attributional retraining include its cost effectiveness, relative ease of administration, and its basis on sound theoretical principles.

Limitations of Attributional Retraining as a Career Intervention and Future Directions

It is important to realize that not all career-related difficulties are due to maladaptive attributions. Likewise, successful career development cannot always be attributed to a belief that career success is internally-caused and controllable. The use of attributional retraining for all clients could be counterproductive and might even create an ethical dilemma. For example, clients seeking career counseling because they lack certain decision-making skills or important information for making career decisions require a different intervention strategy than clients who have access to information and exhibit adequate decision-making skills yet espouse maladaptive career beliefs that inhibit effective career decision making. Furthermore, it may be adaptive in some situations (e.g., discriminatory practices that are beyond an individual's control) to attribute career-related outcomes to uncontrollable factors. In order to effectively utilize attributional retraining as a career counseling strategy, counselors will need to work with clients to identify

aspects of the career decision-making process that are within their control and aspects of the process that are not (Albert & Luzzo, 1997).

Some of the important questions about the application of attributional retraining to career counseling that have yet to be fully addressed in the literature include the following:

1. Is the notion of attributional retraining and a focus on personal control and responsibility for career decision making an appropriate perspective across cultures (e.g., cultural groups with a collective or "universal good" orientation)?

2. Is attributional retraining more appropriate as a career intervention for certain types of clients (e.g., those who possess certain attributes) than it is for others?

3. Do changes in career decision-making attributional style result in other favorable changes in career decision-making attitudes, beliefs, and behaviors?

4. Are changes in career decision-making attributional style that result from attributional retraining sustained over time?

In an ongoing effort to increase our understanding of the potential utility of attributional retraining procedures in career development, extending this line of research is clearly warranted. In particular, future studies should attempt to ascertain the limitations of utilizing such a brief intervention on long-term career development. Evaluating the effectiveness of attributional retraining as a supplement to other types of career interventions may prove particularly helpful in this regard. It also will be important for researchers to evaluate the effectiveness of attributional retraining with diverse clientele, including ethnic minorities and non-college student populations. Additional safeguards to control for potential demand characteristics also should be considered in future investigations. Furthermore, research designed to determine the effects of attributional

retraining on other measures of adaptive career decision making (e.g., career decisiveness) will be helpful in determining the overall efficacy of attributional retraining procedures within the career development domain.

An Attributional Model of Career Decision Making

Based on a series of propositions forwarded by social cognitive theorists (Bandura, 1977, 1982, 1997; Seligman, 1975; Abramson, Seligman, & Teasdale, 1978; Weiner, 1986) and the results of numerous empirical investigations supporting linkages between attributional style and career development (Bernardelli, De Stefano, & Dumont, 1983; Blustein, 1987, 1988, 1989; Fuqua, Blum, & Hartman, 1988; Gable, Thompson, & Glanstein, 1976; Luzzo & Ward, 1995; Taylor, 1982; Trice, Haire, & Elliott, 1989; Wu, 1991), the process depicted in Figure 1 presents a graphic overview of an Attributional Model of Career Decision Making. It is hoped that ongoing development of the model will provide career development researchers and practitioners with a useful framework for integrating causal attributions for career-related events into the career decision-making process.

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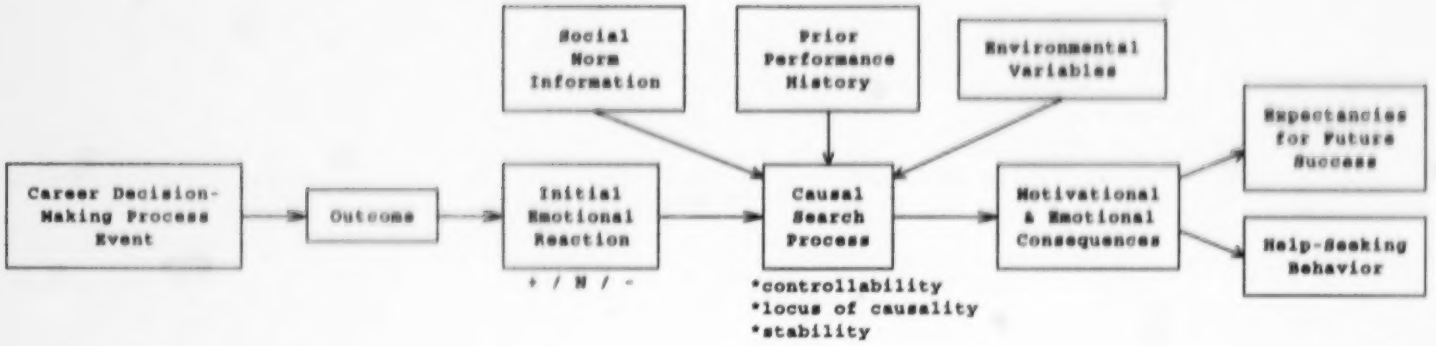
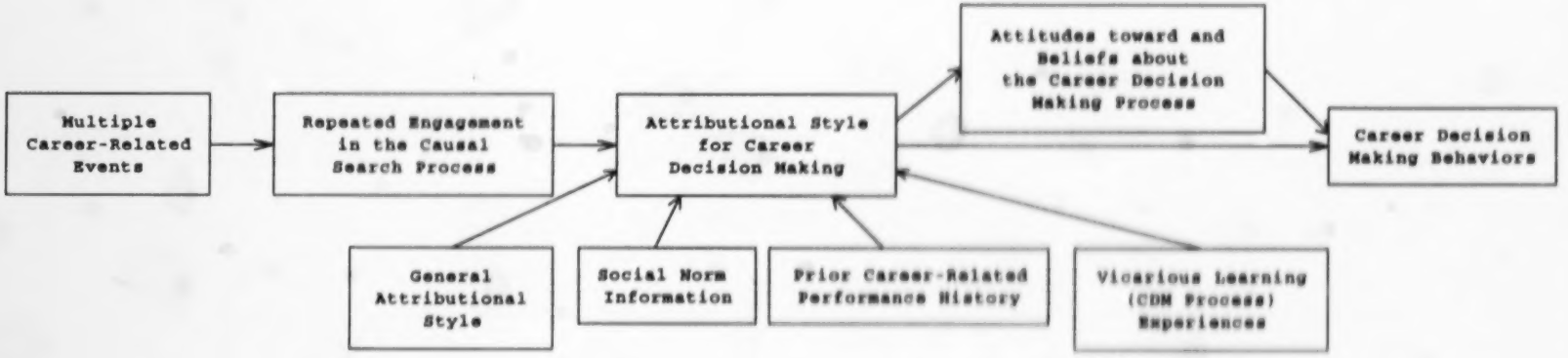
Figure Caption Page

Figure 1. An Attributional Model of Career Decision Making




Multiple Career-Related Events
Repeated Engagement in the Causal Search Process
Attributional Style for Career Decision Making
Attitudes toward and Beliefs about the Career Decision Making Process
Career Decision Making Behaviors
General Attributional Style
Social Norm Information
Prior Career-Related Performance History
Vicarious Learning (CDM Process) Experiences

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